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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,116	08/10/2001	Peter R. Anderson	47079-066	6267

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EXAMINER	
MARKS, CHRISTINA M	

ART UNIT	PAPER NUMBER
3713	14

DATE MAILED: 04/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/928,116	Applicant(s) ANDERSON ET AL.	
	Examiner C. Marks	Art Unit 3713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) *11-23* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 6, and those dependent therefrom recite the limitation that each selection is randomly determined after applying a weighted probability for achieving a winning outcome to each unoccupied ones of the locations wherein the probability varies with successive ones of the selection. The weighted probability is not defined in a manner in which one of ordinary skill in the art would understand how it is calculated or achieved, what it represents, as well as how it affects selections, thus it is indefinite in that the claim provides no definition into what it represents or how it is ascertained and used. A skilled artisan would not be able to replicate the language defined by the claims as it is indefinite how the weighted probability is determined or calculated with respect to the best location.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-10, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett (WO 98/09259) in view of Gasper et al. (US Patent No. 6,213,873).

Bennett discloses a method and apparatus for conducting a game of chance on a gaming machine wherein a player places a wager and the machine is controlled by a processor wherein an array of locations displayed on a video screen (page 3, lines 23-24) is alternatively selectable by both the player and the processor (FIG 2 and page 2, lines 26-29) for placing of first and second symbol types (FIG 3). A payout is awarded based upon the outcome of the game (page 2, line 29). Bennett discloses that in the event the player wins the game by aligning three of the selected zones in a straight line, the machine will pay a prize equivalent to the sum of the prizes (page 4, lines 15-18). Bennett does not disclose the payout for the other two possible outcomes. However, it is notoriously well known in the art that there is a payout associated with all possible outcomes of a gaming event wherein a first payout is paid for a win, a second payout is used for a loss and a third for a draw. Such a well-known example is in blackjack where a payout is positive if the player has won, neutral if the player and dealer have drawn and negative if the dealer has won. Incorporation for a payout associated with each possible outcome is therefore notoriously well known and would have been obvious to one skilled in the art. As would be understood by one of ordinary skill in the art and supported by

the remarks of the Applicant, Bennett et al. would incorporate selections of the processor in a random manner, as would be required by the gaming regulations associated with slot machine.

However, Bennett et al. do not disclose that the processor varies its style of play throughout the game.

Gasper et al. teach of games of strategy that are designed to be executed on a computer (Column 1, lines 26-28) wherein there are alternate selections between the player and the processor. Gasper et al. disclose in such strategy games, it is advantageous to allow the processor to vary the winning strategy by applying a weighted probability associated with the time allowed for the selection with each successive turn (Column 2, lines 5-15). The probability of using the winning strategy is weighted based upon the time allowed to make the decision as well as the chance of success for the square is thus varied with each successive turn. As many moves as allotted possible by the winning strategy are evaluated for a probability for success. By adapting the response of the processor to the player's skill (Column 2, lines 31-34), the weighted probability of using a winning strategy is based not upon a set function for playing, but on a variance in response to game plays. Gasper et al. disclose that by varying the winning strategy, thus weighted probability, for each turn, the system is able to control the percentage of wins by the player (Column 2, lines 5-17). Though Gasper et al. do not explicitly link the probability for using a winning strategy as a function of the number of times such successive selections have been made and increase about 10% with each selection, such a choice as a means to adapt the winning strategy would have been one of obvious to one of ordinary skill in the art in view of the disclosure of Gasper et al. The purpose of Gasper et al. is to keep a solid winning percentage rate for the player in order to keep the player from getting discouraged. It is notoriously well known in the gaming world that this percentage must in addition also be controlled in order to maintain proper yield and therefore, absent a showing of criticality, the

manner in which this percentage would be maintained as a means of varying the selections of the processor to keep the desired level of performance would be obvious to one of ordinary skill in the art. Therefore, it would also be within the scope of Gasper et al. to control the winning percentage rate for the casino as discussed below. Variance based upon a set performance schedule would control the winning percentage of the player in the same manner as varying the level of computer play based on player decision as both are recognized to result in known outcomes for a set percentage of the time thus both would provide adequate means to control the winning percentage of the gaming machine and are thus design choices which would be obvious to one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art to apply the teachings of Gasper et al. to the disclosure of Bennett. Though the teachings of Gasper et al. are directly embodied in example as a chess game, they are disclosed to be related not only to chess but also to games of strategy, thus directly relate to the tic-tac-toe game as disclosed by Bennett. Gasper et al. evaluates each square within the skill level to determine which would be the best move. It would be within the scope of Gasper et al. to be able to assess each unoccupied square when applied to tic-tac-toe, as opposed to chess, as the combination of possibilities is greatly reduced and thus one of ordinary skill in the art would find it obvious that the weighted probability would be assigned to each square and level of play could be duly varied from there as desired by Gasper et al. for such a game. Further, one of ordinary skill in the art recognizes that because of the inherent symmetry in a tic-tac-toe board and game, there would be multiple squares resulting as the best location when applying the Gasper et al. strategy and thus a need for a secondary rule would be required to choose among the multiple best locations. Bennett discloses that the machine chooses the location of the square but does not specifically state how. Yet due to the nature of slot machines, a skilled artisan would find it obvious to the

Bennett disclosure that the choice must be random in order to keep the game a game of chance. Thus, if the results of Gasper et al. result in a multiplicity of best locations, a skilled artisan would recognize the need for a secondary method of choice and thus would be motivated to use a random selection as it has already been determined all the places have equal weight and thus choosing randomly would be obvious to a game of chance to complete the actual selection when there is a tie in the analysis of the weighted probabilities as no more than one square can be chosen.

Gasper et al. teach that games of strategy that use no adaptive strategy can quickly overwhelm players of limited skill (Column 1, lines 57-62) while games of strategy that only allow the adaptive strategy to be defined prior to competition (Column 1, lines 65-67; Column 2, lines 1-4) can discourage play. Further, Gasper et al. teach that by using a processor that uses an adaptive strategy, the player is assured of continuously learning the strategy related to the game as well as not becoming unduly discouraged by repeated loss (Column 2, lines16-18). Gasper et al. also teach that by using adaptive selection, the winning rate of the player can be controlled. One of ordinary skill in the art would thus be motivated to combine the teachings of Gasper et al. with that disclosed by Bennett in order to allow the bonus game of Bennett to employ an adaptive strategy wherein the player will not become frustrated with or discouraged by play which are disadvantages disclosed by Gasper et al. for not using the adaptations between turns. Further, as disclosed by Gasper et al. when the strategy for choosing a winning move is adapted, the player is more likely to learn the strategy involved with the game as well as not becoming discouraged. Therefore, a further reason for using this adaptive strategy lies in the fact that it is notoriously well known in the gaming art that players are more likely to play games they perceive they have a better chance of winning and do not become discouraged

with, which will result in the Bennett slot machine when adaptive strategy is used to allow players to learn the strategy involved thus generating a greater revenue for the casino.

Further supporting a secondary choice of the random nature, the issue remains that by using adaptive strategy the game may not fall within the regulations of the gaming commission. As admitted by Applicant, regulatory authorities generally do not allow sophisticated games of mental strategy to be employed in gaming machines (page 6, lines 18-19). Further, wagering games and, in particular, slot and video gaming machines are generally limited to utilizing random selection process with weighted probabilities to determine the outcome of a game (page 6, lines 19-21). The Examiner agrees with the assertion and confers that it would be obvious to one of ordinary skill in the art. One of ordinary skill in the art would therefore understand that while using the adaptive strategy of Gasper et al. would be desirable for the reasons disclosed above in order to not initially overwhelm players and help them learn the game, a means of random selection must also be used in order to have pay tables be in compliance with the regulations defined by the gaming commissions as to not provide an unfair game to consumers. One of ordinary skill would be motivated to apply a random factor as a secondary method to Gasper et al. after each of the square have been properly weighted and evaluated as it is disclosed above and a well known fact in the art that for a gaming machine to be acceptable, it must be fair, and have the means to conform with the standards of operations set forth by the gaming commission, which would thus include a factor of randomness in actually determining the square to be selected after analyzing the best moves.

Response to Arguments

Regarding Applicant's argument that weighted probabilities are properly defined, the Examiner respectfully disagrees. While the Examiner agrees that these probabilities are often

used in the art and are fully understood, the Examiner also states that there are such a large number of ways to establish these probabilities and without definite language a skilled artisan would not be able to ascertain the weighted probability chosen by and used in the Applicant's invention as there are just so many that are known in the art.

Regarding the Applicant's argument that the claims are no longer contradictory, the Examiner agrees and thanks the Applicant for the corrective language to make the claims more definite.

Regarding Applicant's argument that neither Gasper nor Bennett has an effect of randomness, the Examiner respectfully disagrees as argued above in the newly formed rejection. The combination in application to Bennett would lend itself to said randomness and the Examiner has clarified this position in the rejection of the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Marks whose telephone number is (703)-305-7497. The examiner can normally be reached on Monday - Thursday (7:30AM - 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa J Walberg can be reached on (703)-308-1327. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmm
April 26, 2004

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